

SELF-MONITORING FLOW-THROUGH HEATER

Abstract

A self-monitoring flow-through heater. The heater has a wire inside a tube, and the wire heats and monitors the temperature of a fluid flowing through the tube. The wire has a high specific resistivity and a high temperature coefficient of resistance, so that monitoring the voltage across and/or the current flowing through the wire measures the mean temperature of the wire and of the fluid in the tube.